favorable influences of our equal warm climate. The genus is named after Araujo a Portuguese botanist, and numbers thirteen species which are natives of tropical and subtropical America. In Walp. Ann. v. 501 the species is referred to Von Martius, genus *Schubertia*.

On a Micro-Lepidopterous Insect destructive to the Potato.

By E. Meyrick, B.A.

My attention was recently called by Mr. Macleay to the ravages of a small moth, belonging to the *Tineina*, which may under favourable circumstances become an almost fatal pest to potato-growers. Mr. Macleay received lately a large potato completely riddled with living larvæ of this insect, from which subsequently the imagos emerged freely during the earlier part of February, but the larger number of them unfortunately escaped; on such specimens as were preserved I am enabled to make the following remarks.—There can be little doubt that the species is an imported one, and I have satisfied myself that it is probably identical with *Lita Solanella*, described by Boisduval, J. B. Soc. Centr. Hort., November, 1874, as being very injurious to potatoes in Algeria; he refers it to the genus *Bryotropha*, but it is probably better placed in the closely allied genus *Lita*. I have not access to Boisduval's own description, but in the succeeding year M. Ragonot, of Paris, abstracted the essential points of his account, and added some remarks of his own, in the Bull. Soc. Ent. Franc., 5 (v), pp. xxxv.—xxxvii. He states that the eggs are laid on the young shoots of the plant; that the larvæ, as soon as hatched, eat into the root-stock and descend until they reach a tuber; and that they remain in this, eating galleries completely through its substance, during the remainder of their larval existence. The perfect insect (of which Boisduval bred only a single specimen) is nearly allied to *L. epithymella*,

Stgr., of which the larvæ feeds in an allied plant, *Solanum nigorum*, but in a different mode, by mining in the leaves; from this latter it differs, especially by the much longer terminal joint of the palpi. The potatoes affected rot and become worthless, even animals refusing them; in certain districts three-fourths of the crop was thus destroyed. The above-mentioned details of habit, so far as my information goes, all apply in the present case. The specimen potato must have contained originally at least forty larvæ, and was pierced with galleries in every direction, but chiefly round the exterior beneath the skin, so that it was wholly corrupted and useless. The larvæ pupated within their galleries, near the entrance, which they closed with silk. In the absence of good-bred specimens of the imago, it will be sufficient to describe it as a rather small narrow-winged member of the Gelechidæ, expanding about seven lines, with long recurved palpi and dull brown-grey, faintly-mottled fore wings. The particular specimens under consideration are believed to be from the Hunter River district; and Mr. Macleay is acquainted with the fact of its having occured in abundance, some years back, near Sutton Forest. It seems to me that to this species are probably also to be referred several specimens in my collection, captured at Melbourne and Sydney and in the Shoalhaven district. This must be confirmed by further comparison. At any rate, there is little doubt that the species is of wide general distribution, and only requires favourable circumstances to become as dangerous economically as the Colorado beetle itself. Judging from the fact of its thriving in Algeria, but not having shown itself further north (although an allied species occurs in Spain), it would seem that a hot and somewhat dry climate is required for its development; and probably wet summers would be fatal to it. It is likely that the climate of this colony would in most seasons suit the insect extremely well. What is its native country it would probably be hard to discover, as in the case of most domestic insects. It does not seem to have been noticed in the home of the potato

(America), and it is therefore perhaps more likely that it naturally feeds on some other species of *Solanum* in the inland regions of Africa, and has spread thence on a congenial food-plant being brought to meet it. It remains only to suggest an effectual remedy; this I am, unfortunately, unable to do. The larva being an internal feeder, no external washes or dressings could produce any effect, nor is it discoverable without digging up the plant. Should a crop be discovered, on harvesting, to be infested with this insect, the worthless tubers should not be thrown aside, but carefully destroyed with fire; this would go far to diminish the numbers of the insects next season, but although it might keep them in check, would not be effectual as a cure; and the moth, whose appearance would soon be learnt, might also be destroyed when seen. As the insect is now established, no other precautions are available.

On two new species of Helix from the Louisiade Archipelago,

By James C. Cox, M.D., F.L.S., &c.,

Plate 16.

1.—Helix (*Geotrochus*) gurgustii, Fig. 1.

Shell imperforate, broadly conoid, white, diaphanous, opaque, shining, granular on the surface; whorls fine, gradually increasing in size, flat, last sharply angled at the periphery, pinched and everted at the peristome, reflexed at the insertion; base flat; peristome bright pink, lunulately-elongated, margins approached, everted and beaked at the centre; aperture white within.

Diameter, greatest 1·10; least 0·84; height 0·80 of an inch.

Habitat, Rossell Island, Louisiade Islands, Torres' Straits.

This fine species is in the Hargravesian Collection in the Australian Museum; it is the same type of shell as *Helix Louisiadensis* of MacGillivray, but is a larger species, easily